

Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as obvious over Hong et al. (Wiley InterScience) in view of Munns (University of Wisconsin-Madison) and further in view of Yanakiev (UCLA Electrical Engineering). Applicants respectfully traverse this rejection.

Claim 1 (and claim 2 by virtue of its dependency from claim 1) describes a simulator that includes a computer, which stores computer-aided design programs. The claims specify that the computer-aided design programs include:

- (1) a first calculating means for calculating outputs that describe the behaviors of an engine, a transmission, and a body of a vehicle at a “first calculation cycle”; and
- (2) a second calculating means for inputting some of the calculated outputs from the first calculating means and for calculating an output describing non-linear behavior at a “second calculation cycle.”

Furthermore, the claims additionally specify that the second calculation cycle is shorter than the first calculation cycle.

Accordingly, to justify the rejection, the PTO must provide:

1. an explanation of how Hong et al. supposedly teaches or suggests that the calculations for describing the behaviors of an engine, a transmission, and a body are all performed at the same calculation cycle (the “first calculation cycle”);
2. an identification of which Hong et al. calculations are relied upon as being performed at a “second calculation cycle”; and
3. an indication of how Hong et al. supposedly teaches or suggests that the second calculation cycle is shorter than the first calculation cycle.

The Office Action does not provide this information. Therefore, proper justification of the rejection has not been provided.

During the personal interview of March 29, 2005, the examiners stated that some of the claimed subject identified above is inherent. Specifically, they stated that it is inherent that the calculations for describing the behaviors of an engine, a transmission, and a body are all performed at the same calculation cycle, and they also stated that it is inherent that Hong et al. second calculation cycle is shorter than the first calculation cycle. This cannot be true. Regarding the first statement, applicants' representative explained that the simulator described by Hong et al. can very well be configured so that the calculations for describing the behaviors of the engine, the transmission, and the body are not all performed at the same calculation cycle. Therefore, performing all three calculations at the same calculation cycle cannot be inherent. Regarding the second statement, applicants' representative explained that the Hong et al. simulator could be configured so that the processing associated with the "second calculation cycle" has a calculation cycle that is greater than or equal to the calculation cycle for the processes that describe the behaviors of the engine, the transmission, and the body. Therefore, the "second calculation cycle" being shorter than the "first calculation cycle" could not be inherent.

The examiners' response is not understood. Initially upon hearing these explanations, the examiners responded that they agreed that the Hong et al. simulator could be configured in these alternative embodiments (i.e., without calculations for the engine, transmission, and body performed at the same calculation cycle and/or with the "second calculation cycle" being greater than or equal to the other calculation cycles). However, a short time later in the discussion, they resumed saying that the subject matter was inherent. It is not possible to believe that the Hong et al. simulator could be configured in the alternative embodiments and also to believe that claimed

subject matter under discussion was inherent. The examiner provided no explanation to support this belief.

The Examiners added that, as a tentative impression, it did not seem possible to distinguish applicants' invention from the prior art by expounding upon the calculation cycles. However, if the PTO is going to issue a rejection based on a prior art reference, it has to be able to justify the rejection based on that reference. A general suspicion that the claimed subject matter must have been documented in public somewhere is insufficient for maintaining a rejection.

For at least the reasons provided above, applicants submit that the present rejection should be withdrawn.

Nonetheless, applicants provide an additional reason to withdraw the rejection. As noted by the examiners during the personal interview, claim 1 describes some of the simulator's elements in "means-plus-function" format. For example, note the "first calculating means for calculating ..." and the "second calculating means for inputting ... and for calculating ...". Under 35 U.S.C. § 112, paragraph 6, these elements are interpreted as describing: (1) the corresponding "structure, material, or acts" described in the specification; and (2) equivalents of the "structure, material, or acts."

As example "structure, material, or acts" that correspond to the first and second calculating means, applicants' specification discusses on page 18, first paragraph, structure and acts represented as steps S10-S20 and S100 in Figs. 2 and 16. Fig. 2 shows the design of the programs to be downloaded on a main unit of a simulator, and Fig. 10 shows the operation based on the downloaded programs. The specification also provides on page 18, lines 15 and 19, the

example values of 200 μ sec for the first calculation cycle and 20 μ sec for the second calculation cycle.

It should be apparent that *Hong et al.* does not teach or suggest this subject matter. As explained above, the claims describe this subject matter in accordance with 35 U.S.C. § 112, sixth paragraph. Thus, for this additional reason, the rejection of claims 1 and 2 should be withdrawn.

During the personal interview, the examiner discussed the application of the provisions of 35 U.S.C. § 112, sixth paragraph, as “invoking” those provisions. However, the statutory provisions apply by merely filing the claims. An applicant’s subsequent arguments in traversal of a rejection do not “invoke” any provisions that do not already apply. That is, the claims have not been changed, and the applicants’ do not present new subject matter for consideration in the present submission. The rejection was no more valid at the time of the first Office Action than it is now.

At this time, applicants’ respectfully solicit the withdrawal of the rejection of claims 1 and 2.

Claims 3 and 4 stand rejected under 35 U.S.C. § 103(a) as obvious over Hong et al. in view of Munns, and further in view of Havener et al. (U.S. Published Patent Application 2003/0018399). Applicants respectfully traverse this rejection.

This rejection relies on Hong et al. and Munns to reject base claim 1. However, as shown above, Hong et al. and Munns cannot support the rejection of claim 1. Therefore, the rejection of claims 3 and 4 is not justified.

For this reason, withdrawal of the rejection of claims 3 and 4 is now solicited.

Claims 5-8 are objected to for depending from a rejected base claim, but it is indicated in the Office Action that the claims would be allowable if claims 5-7 were rewritten in independent form. However, as discussed above, the base claim should not be rejected, so it is not necessary to rewrite claims to gain the allowance of claims 5-8.

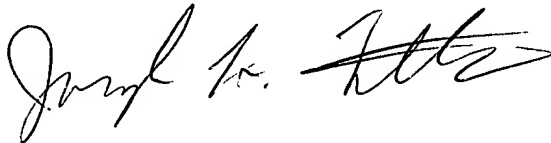
As a final matter, applicants' reference the amended drawing filed with the September 21, 2004 submission. The subsequent Office Action does not indicate whether the Examiner accepts the amendment. (Perhaps, the reference to drawings filed on "12 March 2001" was inadvertent.) Applicants request the Examiner indicate his approval of the amendment in his next communication.

As is apparent, the present submission contains no amendments. If for some reason an additional search of the prior art is deemed necessary, the reason did not result from any new action of applicants taken after issuance of the final Office Action. Accordingly, this present submission is worthy of full consideration without filing a formal Request for Continued Examination (RCE).

In view of the remarks above, applicants now submit that the application is in condition for allowance. Accordingly, a Notice of Allowability is hereby requested. If for any reason it is believed that this application is not now in condition for allowance, the Examiner is welcome to contact applicants' undersigned attorney at the telephone number indicated below to arrange for disposition of this case.

In the event that this paper is not timely filed, applicants petition for an appropriate extension of time. The fees for such an extension, or any other fees which may be due, may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
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A handwritten signature in black ink, appearing to read "Joseph L. Felber", written in a cursive style.

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